

CALIFORNIA CODE OF REGULATIONS
TITLE 20
Chapter 4, Article 8, Sections 1670 - 1675

CALIFORNIA HOME ENERGY RATING SYSTEM PROGRAM

Proposed Final 15 Day Language Changes

□ **1670. Scope.**

These regulations establish the California Home Energy Rating System Program pursuant to Public Resources Code Section 25942, including procedures for the training and certification of raters, and a certification program for home energy rating system organizations (herein referred to as providers) and for home energy rating services (herein referred to as rating systems). These regulations apply only to field verification and diagnostic testing services pursuant to Chapter 7 of the ACM Manual for demonstrating compliance with Title 24 building energy performance standards. Regulations for other home energy rating services will be addressed in a subsequent rulemaking proceeding. Until the subsequent rulemaking is concluded, home energy rating system services other than field verification and diagnostic testing are not required to be certified.

NOTE: Authority: Public Resources Code Sections 25942 and 25213.
Reference: Public Resources Code Sections 25942 and 25213.

□ **1671. Definitions.**

For the purposes of these regulations, the following definitions shall apply:

ACM Manual means the *Low-Rise Residential Alternative Calculation Method Approval Manual* (Energy Commission Publication No. P-400-98-003) adopted in Section 10-109(b)(2) of Title 24, Part 1 of the California Code of Regulations.

Certified, as to a provider and rating system, means having successfully completed the certification requirements as specified by Section 1674.

Commission means the State of California Energy Resources Conservation and Development Commission, commonly known as the California Energy Commission.

Financial Interest means an ownership interest, debt agreement, or employer/employee relationship. Financial interest does not include ownership of less than 5% of the outstanding equity securities of a publicly traded corporation.

Independent Entity means having no financial interest in, and not advocating or recommending the use of any product or service as a means of gaining increased business with, firms or persons specified in Section 1673(i).

NOTE: The definitions of “independent entity” and “financial interest,” together with Section 1673(i)(1), prohibit conflicts of interest between providers and raters, or between providers/raters and builders/subcontractors.

Rater means a person performing the site inspection and data collection required to produce a home energy rating or the field verification and diagnostic testing required for demonstrating compliance with the Title 24 energy performance standards, **who is listed on a registry in compliance with Section 1673(c).**

Rating means a representation on a 0 to 100 scale of the annual source energy efficiency of a home, as specified in Section 1672(c).

Provider means an organization that administers a home energy rating system in compliance with these regulations (referred to as a “home energy rating service organization” in Section 25942 of the Public Resources Code).

Rating System means the materials, analytical tools, diagnostic tools and procedures to produce home energy ratings and provide home energy rating and field verification and diagnostic testing services (referred to as “home energy rating services” in Section 25942 of the Public Resources Code).

Service Water Heating means service water heating as defined in Section 101(b) of Title 24, Part 6 of the California Code of Regulations.

Source Energy means source energy as defined in Section 101(b) and calculated as specified in Section 102 of Title 24, Part 6 of the California Code of Regulations.

Space cooling means space cooling as defined in Section 101(b) of Title 24, Part 6 of the California Code of Regulations.

Space Heating means space heating as defined in Section 101(b) of Title 24, Part 6 of the California Code of Regulations.

NOTE: Authority: Public Resources Code Sections 25942 and 25213.

Reference: Public Resources Code Sections 25942 and 25213.

□ **1672. Requirements for Rating Systems.**

- (a) Rating Site Inspections and Diagnostic Testing. Each rating shall be based on a site inspection of the home, and diagnostic testing as specified by the rating system. Each rating system shall have documented procedures for site inspection and diagnostic testing of rated homes.
- (b) Energy Uses Rated. Each rating system shall rate the total combined energy efficiency of the following energy uses of each home rated:
 - (1) space heating;
 - (2) space cooling; and
 - (3) service hot water.
- (c) Rating Scale. Each rating system shall rate the annual source energy efficiency of homes on a scale of 0 to 100. The rating shall be for the combined total of the three energy uses described in Section 1672(b).

- (d) Field Verification and Diagnostic Testing. The provider and rater shall provide field verification and diagnostic testing of energy efficiency improvements as a condition for those improvements to qualify for Title 24 building energy performance standards compliance credit, as required by Chapter 7, Appendix F, and Sections 3.8.3 and 3.9 of the ACM Manual. Providers and raters shall not knowingly provide untrue, inaccurate or incomplete field verification or diagnostic testing information or report field verification or test results that were not conducted in compliance with these regulations. **Providers and raters shall not knowingly accept payment or consideration in exchange for reporting a rating or field verification and diagnostic test result that was not in fact conducted and reported in compliance with these regulations.**

NOTE: Authority: Public Resources Code Sections 25942 and 25213.
Reference: Public Resources Code Sections 25942 and 25213.

□ 1673. Requirements for Providers.

- (a) Training and Certification Procedures for Raters. Each provider shall conduct the following rater training and certification procedures.
- (1) Each provider's training program shall include classroom and field training **for rater applicants** in analysis, theory and practical application in at least the following areas:
 - (A) home energy consumption and efficiency data collection, organization and analysis;
 - (B) principles of heat transfer;
 - (C) building energy feature design and construction practice, including construction quality assurance and "house as a system" concepts;
 - (D) safety practices relevant to home energy auditing procedures and equipment;
 - (E) home energy audit procedures;
 - (F) energy efficiency effects of building site characteristics;
 - (G) types and characteristics of space heating, space cooling, service hot water and hard wired lighting systems;
 - (H) mathematical calculations necessary to utilize the rating system;
 - (I) the function and proper use of diagnostic devices including but not necessarily limited to: duct leakage testing equipment, blower doors and air flow and pressure measurement devices;
 - (J) construction types, equipment types and their associated energy efficiency ramifications;
 - (K) field verification and diagnostic testing requirements of Chapter 7, Appendix F, and Sections 3.8.3 and 3.9 of the ACM Manual; and
 - (L) California Home Energy Rating System Program requirements specified in these regulations.
 - (2) The training shall include thorough instruction in the use of the provider's rating system.
 - (3) The training shall require rater **applicants** to satisfactorily perform field verification and diagnostic testing for at least two homes in the presence and under the direct supervision of

the provider's trainer. The provider shall review and approve this field verification and diagnostic testing for accuracy and completeness.

- (4) The provider shall require each rater **applicant** to take a written and practical test that demonstrates his or her competence in all subjects specified in Section 1673(a)(1). The provider shall retain all results of these tests for five years from the date of the test.
 - (5) Each provider may establish a Commission-approved challenge test that evaluates competence in each area addressed by the provider's training program. If a rater applicant successfully passes this challenge test, the provider may waive the classroom training requirement and the written and practical test requirements for that applicant. An applicant who passes this challenge test must also successfully meet the requirements specified in Sections 1673(a)(3) and (a)(4).
- (b) Rater Agreements. Each provider shall **require each rater applicant who has met the requirements of Section 1673(a) to enter into an agreement with the provider** to provide home energy rating and field verification and diagnostic services in compliance with these regulations. The agreement shall require raters to:
- (1) provide home energy rating and field verification services in compliance with these regulations;
 - (2) provide true, accurate, and complete ratings, field verification and diagnostic testing; and
 - (3) comply with the conflict of interest requirements as specified in Section 1673(i).
- (c) Rater Registry. Each provider shall certify that each rater **applicant** has **met** the requirements of Section 1673(a) and **entered into an agreement meeting** the requirements of Section 1673(b). The provider shall maintain a registry of all raters who meet these requirements, **provide an electronic copy of the registry to the Commission**, and make that registry available **in printed or electronic form upon written request**.
- (d) Field Verification and Diagnostic Testing Data Collection. Each provider shall collect and maintain for a period of five years, the following information for each home for which field verification and diagnostic testing service is provided:
- (1) *Certificates of Field Verification and Diagnostic Testing*;
 - (2) *Certificates of Compliance*;
 - (3) *Installation Certificates*; and
 - (4) other reports made pursuant to Chapter 7 of the ACM Manual.
- Alternatively, the information contained in these documents may be collected and stored electronically as long as all of the content and certification signatures from the specified documents are retained.**
- (e) Field Verification and Diagnostic Testing Evaluation. Providers shall maintain a database of the information specified in Section 1673(d) for **a minimum 10% random sample** of the homes **actually** field verified and diagnostically tested annually, or 500 such homes annually, whichever is less. **Each provider shall provide this information in electronic form to the Commission for evaluating the effectiveness of field verification and diagnostic testing.** To the extent that the Commission makes this information public, it will do so only in aggregated form. All of this

information shall be organized according to climate zones as defined in Section 101(b) of Title 24, Part 6 of the California Code of Regulations.

- (f) Data Submittal. Upon the Commission's request, but not more frequently than annually, a provider shall submit to the Commission the total of the number of homes for which field verification and diagnostic testing services were provided since the last data submittal, and a report of the following information for each home for which field verification and diagnostic testing service was provided:
- (1) the energy efficiency improvements field verified and diagnostic tested;
 - (2) whether or not the builder chose to include the home in a sample for field verification and diagnostic testing as specified in Section 7.4 of the ACM Manual;
 - (3) whether or not initial field verification and testing as specified in Section 7.4.1 of the ACM Manual was conducted on the home;
 - (4) whether or not the home in a sample was actually selected and field verified and diagnostically tested as specified in Section 7.4.2 of the ACM Manual;
 - (5) whether or not the home in a sample was actually selected for resampling and field verified and diagnostically tested after a sampling failure was found in the sample as specified in Section 7.4.3 of the ACM Manual;
 - (6) whether or not the home in a sample was field verified and diagnostically tested and corrective action was taken after a resampling failure was found in the sample as specified in Section 7.4.3 of the ACM Manual;
 - (7) whether or not the homeowner declined to have field verification, diagnostic testing and corrective action taken after occupancy as specified in Section 7.4.3 of the ACM Manual.
- All of this information shall be organized according to climate zones as defined in Section 101(b) of Title 24, Part 6 of the California Code of Regulations. To the extent the Commission makes this information public, it will do so only in an aggregated form.
- (g) Training Materials Retention. Each provider shall retain for at least five years after the last date they are used at least one copy of all materials used to train raters.
- (h) Quality Assurance. Each provider shall have a quality assurance program that provides for at least the following:
- (1) Initial review. The provider shall review and approve for accuracy and completeness the field verification and diagnostic testing documentation for at least the first five homes which a rater performs after completion of the requirements specified in Section 1673(a)(1), (2) and (3), not including those homes field verified and diagnostically tested under the provider's direct supervision as specified in Section 1673(a)(3).
 - (2) Field checks of raters. For each rater, the provider shall annually evaluate the greater of one home or one percent of the rater's annual total of homes for which field verification and diagnostic testing services were provided. The provider shall independently repeat the field verification and diagnostic testing to check whether field verification and diagnostic testing was accurately completed by the rater, and determine whether information was completely collected and reported as required by Chapter 7 of the ACM Manual.

- (3) Complaint response system. Each provider shall have a system for receiving complaints. The provider shall respond to and resolve complaints related to ratings and field verification and diagnostic testing services and reports. Providers shall ensure that raters inform purchasers and recipients of ratings and field verifications and diagnostic testing services about the complaint system. Each provider shall retain all records of complaints received and responses to complaints for five years after the date the complaint is presented to the provider.
- (i) Conflict of Interest.
 - (1) Providers shall be independent entities from raters who provide field verification and diagnostic testing.
 - (2) Providers and raters shall be independent entities from the builder and from the subcontractor installer of energy efficiency improvements field verified or diagnostically tested.

NOTE: Authority: Public Resources Code Sections 25942 and 25213.
Reference: Public Resources Code Sections 25942 and 25213.

□ 1674. Certification of Providers and Rating Systems.

- (a) Application. A person or entity wishing to be certified as a provider and wishing to have a rating system certified shall submit four copies of an application to the Commission. The application shall contain:
 - (1) a complete copy of all field verification and diagnostic testing procedures, manuals, handbooks, rating system descriptions, and training materials;
 - (2) a detailed explanation of how the rating system meets each requirement of Section 1672;
 - (3) a detailed explanation of how the provider meets each requirement of Section 1673;
 - (4) the name, address, and telephone number of the provider and a statement of where its principal place of business is and where and upon whom service of legal process can be made;
 - (5) upon Commission request, if the provider is a corporation, a copy of the articles of incorporation and the current by-laws;
 - (6) if the provider is a partnership, the names, addresses, telephone numbers, and partnership status (for example, general, managing) of all the partners, and a copy of the current partnership agreement;
 - (7) the names, addresses, telephone numbers, and business relationships of all the provider's owners, parents, subsidiaries, and affiliates;
 - (8) a statement that ratings are accurate, consistent and uniform, utility bill estimates are reasonable, and recommendations on cost-effective energy efficiency improvement measures are reliable;

- (9) a statement that the provider understands and will not knowingly fail to comply with the requirements of these regulations; and
- (10) a statement under penalty of perjury that all statements in the application are true, provided in the form specified by Section 2015.5 of the Code of Civil Procedure.
- (b) Confidentiality of Information. Any provider who submits the required application information and wishes to have that information treated as confidential in order to limit its disclosure shall, at the time of submitting the information, apply for a confidential designation as specified in Section 2505 of Title 20 of the California Code of Regulations.
- (c) Commission Consideration.
 - (1) The Commission's Executive Director may request additional information from the applicant necessary to evaluate the application.
 - (2) The Executive Director shall provide a copy of its evaluation to interested persons. The Executive Director may convene a workshop to receive comments from interested persons.
 - (4) Within 90 days of receiving the complete application, the Executive Director shall send to the Commission and to the applicant a written recommendation that the Commission certify the provider and its rating system or deny that certification.
 - (5) The Executive Director shall recommend certifying the provider and rating system if it finds the following:
 - (A) the rating system meets all of the requirements of Section 1672; and
 - (B) the provider meets all of the requirements of Section 1673.
 - (6) The Commission shall act on the recommendation at its next regularly scheduled Business Meeting that is at least fifteen days after the date that the recommendation was mailed to the applicant.
 - (7) The Commission shall certify the proposed provider and rating system if it confirms the Executive Director's findings in Section 1674(c)(5).
 - (8) Upon certification the Commission shall assign the provider a three-digit identification number.
- (d) Re-certification. A certified provider shall notify the Commission whenever any change occurs in any of the information, documentation, or materials, the provider submitted to the Commission under Section 1674(a), and shall submit the changed information to the Commission. Where this changed information could affect the provider's compliance with these regulations, the Commission may require that the provider and the rating system be re-certified under the process described in Section 1674. The Executive Director may waive re-certification for non-substantive changes. The Commission may also require that providers and rating systems be re-certified if the requirements of these regulations are amended or modified.

NOTE: Authority: Public Resources Code Sections 25942 and 25213.
Reference: Public Resources Code Sections 25942 and 25213.

□ 1675. Review by the Commission.

- (a) Annual Review. The Commission may annually review the performance of providers certified under Section 1674 to determine whether the providers comply with the requirements of these regulations. This review may include interviewing recipients of ratings and field verification and diagnostic testing services and reports on a voluntary basis.
- (b) Complaint Proceedings. Any person or entity may file a complaint **concerning any violation of these regulations** as provided for in Section 1230 et. seq. of Title 20 of the California Code of Regulations. The Commission may, for good cause, conduct an investigation and, if necessary, hearing, under the procedures established in Section 1230 et. seq. of Title 20 of the California Code of Regulations.

Each provider shall **provide** all information requested by the Commission **regarding any annual review or complaint proceeding**.

- (c) Commission Determination. If the Commission determines there is a violation of these regulations **or that a provider is no longer providing rating, field verification and diagnostic testing services**, the Commission may revoke the certification of the provider **or take other sanctions pursuant to** Section 1230 et. seq. of Title 20 of the California Code of Regulations.

NOTE: Authority: Public Resources Code Sections 25942 and 25213.
Reference: Public Resources Code Sections 25942 and 25213.